

**REMARKS**

Claims 1-14 are all the claims pending in the application.

**I. Drawing**

Applicants note that a drawing was previously filed on December 13, 2004. The Examiner is respectfully requested to acknowledge acceptance of the drawing in the next PTO communication.

**II. Related Copending Applications**

Applicants advise that the following copending applications related to fluvastatin:

10/738,196, filed December 13, 2003;

10/502,177, filed July 21, 2004;

11/385,599, filed March 21, 2006; and

11/545,650, filed October 10, 2006.

**III. Response to Rejection under 35 U.S.C. § 112, First Paragraph**

Claim 14 was finally rejected under 35 U.S.C. § 112, first paragraph, for the reasons set forth at page 4 of the Office Action.

Applicants respectfully traverse the rejection for the following reasons.

Present claim 14 relates a method for treating hypercholesterolemia, hyperlipoproteinemia, dyslipidemia and atherosclerosis, comprising administering to a mammal in need thereof a therapeutically effective amount of a calcium salt recited in claim

7.

The Examiner's position appears to be that the specification enables for the prevention [sic] for the treatment of hypercholesterolemia, hyperlipoproteinemia, dyslipidemia and atherosclerosis by administering fluvastatin sodium but not for the prevention [sic] of hypercholesterolemia, hyperlipoproteinemia, dyslipidemia and atherosclerosis by administering fluvastatin calcium.

The specification describes at page 1 by reference to U.S. Patent No. 5,354,772, that fluvastatin sodium is useful for inhibiting cholesterol biosynthesis and in the treatment of hyperlipoproteinemia and atherosclerosis. Further, as noted by the Examiner, U.S. Patent No. 6,479,692 describes that salts of sodium and calcium were both known pharmaceutically acceptable salts that retain the desired biological activity of the parent compound and do not impart undesired toxicological effects (col. 11, lines 15-30). Therefore, one skilled in the art would be able to make and use the presently claimed invention in light of the disclosure in the present specification coupled with information known in the art without undue experimentation.

It was asserted that "[t]here is no example" or "guidance in the disclosure" "to show how these diseases can be treated better by fluvastatin in calcium form than in sodium form" (pages 5 and 8 of the Office Action).

Applicants respectfully disagree. There are no requirements set forth in either statutes or rules that in order to comply with § 112, first paragraph, a claimed method using a new compound provide better effects than the one using a known compound.

It was also asserted that "[t]he disclosure does not contain any working examples to support prevention of these diseases by fluvastatin calcium" (page 8 of the Office Action).

It should be noted that claim 14 does not recite a method for the "prevention."

In view of the above, Applicants respectfully submit that present claim 14 is in full compliance with the requirements under § 112, first paragraph, and thus the rejection should be withdrawn.

**IV. Response to Rejection under 35 U.S.C. § 103(a)**

Claims 1-14 were finally rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,354,772 to Kathawala et al. in view of U.S. Patent No. 6,479,692 to Ekwuribe et al. for the reasons set forth at pages 10-11 of the Office Action.

Applicants respectfully traverse the rejection for the reasons of record and the following additional reasons.

**a. Claims 9-12**

Present claims 9-12 relate to a method for the preparation of a crystalline calcium salt of formula (IA) or an enantiomer thereof, or a hydrate thereof.

Kathawala et al. discloses indole analogs of mevalonolactone and derivatives thereof. Kathawala et al. further describes, in particular, sodium and potassium salts of fluvastatin (Table 3), which may be prepared by NaOH treatment of the corresponding lactone or hydrolyzable ester. However, Kathawala et al. does not disclose or suggest the processes recited in the present claims, in particular, treating an alkali metal salt of formula IE with a calcium compound.

**b. Claims 1-8, 13 and 14**

Claims 1-6 relate to a calcium salt of formula (IA) or an enantiomer thereof, or a hydrate thereof, prepared by a specific process. As described at pages 6-7 and Examples of the present specification, the processes recited in the claims result in fluvastatin calcium salt or an enantiomer thereof or a hydrate thereof in a crystalline form. In addition, claim 7

relates to a crystalline calcium salt of formula (IA) or an enantiomer thereof or a hydrate thereof. Moreover, claim 8 specifically recites the powder X-ray diffraction pattern and the melting point of the crystalline calcium salt of claim 7. Claim 13 relates to a pharmaceutical composition, comprising a therapeutically effective amount of a calcium salt of claim 7 in combination with one or more pharmaceutically acceptable carriers. Claim 14 relates to a method for treating hypercholesterolemia, hyperlipoproteinemia, dyslipidemia and atherosclerosis, comprising administering to a mammal in need thereof a therapeutically effective amount of a calcium salt of claim 7.

In contrast, as shown in Table III of Kathawala et al., fluvastatin sodium obtained therein was an amorphous solid, which is inferior to a crystalline form at least in terms of stability. Kathawala et al. does not disclose the presently claimed calcium salt of formula (IA), let alone a crystalline calcium salt and that with specified powder X-ray diffraction pattern and melting point.

Furthermore, Ekwuribe et al. is relied upon merely as teaching examples of pharmaceutically acceptable salts and thus does not rectify the deficiencies of Kathawala et al. Therefore, even if, *arguendo*, there might be motivation to combine Ekwuribe et al. with Kathawala et al., the combination still would be result in the presently claimed invention.

Moreover, as described at page 1 of the present specification, hygroscopicity of fluvastatin sodium imposes particular requirements on the manufacture and storage of pharmaceutical compositions comprising fluvastatin sodium. Applicants previously provided evidence showing that the calcium salt of fluvastatin is unexpectedly superior to the sodium salt in terms of hygroscopicity. Specifically, the calcium salt demonstrated 2.8% gain at 84% relative humidity (RH), whereas the sodium salt had 26% gain at 84% RH.

Applicants will resubmit the above-mentioned data in the form of a Declaration subsequently.

It was asserted that "there is no X-ray diffraction data of crystalline form in claims" (page 11 of the Office Action).

Applicants wish to direct the Examiner's attention to present claim 8 which recites the X-ray diffraction data and melting point.

In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw the rejection.

**V. Conclusion**

From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order and such action is earnestly solicited. If there are any questions concerning this paper or the application in general, the Examiner is invited to telephone the undersigned at (202) 452-7932 at his earliest convenience.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: August 10, 2007

By: \_\_\_\_\_



Fang Liu, Ph.D.

Registration No. 51283